

ABSTRACT

Relationship information is previously generated and stored by learning based on camera motion estimation information expressing motion of a video camera, which is detected by a desired image signal picked up by the video camera, and camera motion information expressing physical motion of the video camera, which was obtained by a sensor for detecting physical motion at the same time when the desired image signal was picked up by the video camera. Camera motion estimation information with respect to an inputted image signal is detected from the inputted image signal. Camera motion prediction information with respect to the inputted image signal is generated, based on the camera motion estimation information detected and the relationship information. Based on the camera motion prediction information, a vibration signal for vibrating an object is generated. As a result, vibration data can be easily generated at low costs, based on existing video assets.